IN THE CLAIMS:

Please amend the claims as follows:

1.   (Previously Presented)   A computer implemented method, comprising:

receiving a selection of a portion of a first query having a plurality of portions, wherein the first query comprises an abstract query posed against a database abstraction model for a physical database;

annotating the selected portion of the first query by operation of one or more computer processors and responsive to receiving, via an interface: (i) an annotation for the selected portion of the first query and (ii) a request to annotate the selected portion of the first query with the annotation;

receiving a suggested substitution for the annotated portion of the first query; and

storing, on a storage medium, the annotation and the suggested substitution with a reference to the annotated portion of the first query, wherein the interface is configured to present the annotation in conjunction with the suggested substitution and to allow a user composing a second query to replace, in the second query, the annotated portion with the suggested substitution.

2.   (Previously Presented)   The method of claim 1, wherein the selected portion of the first query comprises one or more query conditions.

3.   (Previously Presented)   The method of claim 1, wherein the selected portion of the first query comprises one or more instance values of data, where instance values are any particular value inputted in a field.

4.   (Previously Presented)   The method of claim 1, further comprising:

providing an interface for building the first query by specifying query portions; and

wherein receiving an indication of the selected portion of the first query comprises receiving a user selection of one or more query portions specified, via the interface, for use in the first query.

5.   (Previously Presented)   The method of claim 1, further comprising providing an interface allowing a user composing the first query to create the suggested substitution for the selected portion of the first query.

6.   (Previously Presented)   The method of claim 1, wherein storing the annotation with a reference to the portion of the first query comprises:

decomposing the portion of the first query into one or more fragments; and

storing the fragments with the annotation.

7.   (Currently Amended)   The method of claim 1, wherein storing the annotation with a reference to the portion of the first query comprises:

substituting a parameter marker for [[an]] a first instance value contained in the portion of the first query; and

storing the portion of the first query with the parameter marker with the annotation;

wherein the annotated portion is programmatically replaced with the suggested substitution responsive to a request from the user, wherein replacing the annotated portion with the suggested substitution comprises at least one of: (i) substituting a second instance value for the parameter marker in the second query; (ii) replacing the annotated portion with user-specified query logic; and (iii) augmenting the annotated portion with user-specified query logic;

wherein the second query includes an instance of the annotated portion, wherein a search is performed to identify annotations pertaining to the second query, wherein the annotation is determined to pertain to the second query by at least one of: (i) determining that the instance is identical to the annotated portion of the first query and (ii) determining, based on one or more predetermined matching rules, that the instance

semantically matches the annotated portion of the first query, and wherein at least a second annotation is not determined to pertain to the second query;

wherein the second instance value is different from the first instance value, wherein the second query is different from the first query, and wherein the selection of the portion of the first query is received from a user composing the first query, and wherein the user composing the first query is different from the user composing the second query.

8-17.   (Canceled)

18.   (Previously Presented)   A computer-readable storage medium containing a program which, when executed by a processor, performs operations comprising:

receiving a selection of a portion of a first query having a plurality of portions, wherein the query comprises an abstract query posed against a database abstraction model for a physical database;

annotating the selected portion of the first query responsive to receiving, via an interface: (i) an annotation for the selected portion of the first query and (ii) a request to annotate the selected portion of the first query with the annotation;

receiving a suggested substitution for the annotated portion of the first query; and

storing, on a storage device, the annotation and the suggested substitution with a reference to the annotated portion of the first query, wherein the interface is configured to present the annotation in conjunction with the suggested substitution and to allow a user composing a second query to replace, in the second query, the annotated portion with the suggested substitution.

19.   (Previously Presented)   The computer-readable medium of claim 18, wherein the operations further comprise providing an interface allowing a user composing the first query to create the suggested substitution for the selected portion of the first query.

20.   (Currently Amended)   The computer-readable medium of claim 18, wherein storing the annotation with a reference to the portion of the first query comprises:

substituting a parameter marker for [[an]] a first instance value contained in the portion of the first query; and

storing the portion of the first query with the parameter marker with the annotation;

wherein the annotated portion is programmatically replaced with the suggested substitution responsive to a request from the user, wherein replacing the annotated portion with the suggested substitution comprises at least one of: (i) substituting a second instance value for the parameter marker in the second query; (ii) replacing the annotated portion with user-specified query logic; and (iii) augmenting the annotated portion with user-specified query logic;

wherein the second query includes an instance of the annotated portion, wherein a search is performed to identify annotations pertaining to the second query, wherein the annotation is determined to pertain to the second query by at least one of: (i) determining that the instance is identical to the annotated portion of the first query and (ii) determining, based on one or more predetermined matching rules, that the instance semantically matches the annotated portion of the first query, and wherein at least a second annotation is not determined to pertain to the second query;

wherein the second instance value is different from the first instance value, wherein the second query is different from the first query, and wherein the selection of the portion of the first query is received from a user composing the first query, and wherein the user composing the first query is different from the user composing the second query.

21.   (Previously Presented)   The computer-readable medium of claim 18, wherein the operations further comprise:

monitoring one or more query portions specified for use in the second query;

searching for annotations associated with the one or more query portions; and

providing an indication of one or more annotations, if found, associated with the one or more query portions.

22-29. (Canceled)

30.   (Previously Presented)   A computer implemented method, comprising:

receiving a selection of a portion of a first query having a plurality of portions, wherein the first query comprises an abstract query posed against a database abstraction model for a physical database;

providing an interface allowing a user composing the first query to create an annotation and request to annotate the selected portion of the first query with the annotation;

by operation of one or more computer processors and in response to receiving the annotation and the request, annotating the selected portion of the first query with the annotation by storing, on a storage medium, the annotation with a reference to the selected portion of the first query;

receiving, from the user composing the first query, a suggested substitution for the annotated portion of the first query;

associating the suggested substitution with the annotated portion of the first query, wherein the interface is configured to present the annotation in conjunction with the suggested substitution and to allow a user composing a second query to replace, in the second query, the annotated portion with the suggested substitution;

monitoring one or more query portions specified for use in the second query;

searching for stored annotations associated with the one or more query portions; and

outputting an indication of one or more annotations, if found, associated with the one or more query portions.

31.   (Previously Presented)   The method of claim 1, wherein the first query comprises a database query.

32.   (Previously Presented)   The method of claim 1, wherein the selected portion of the first query comprises at least one of a query condition, an instance value in the query condition, a specified result field, and a specified formatting of the result field.

33.   (Canceled)

34.   (Previously Presented)   The method of claim 1, wherein the database abstraction model defines a plurality of logical fields that each define: (i) a logical field name, (ii) an access method, and (iii) a location in the physical database for accessing respective data elements in the physical database.

35.   (Previously Presented)   The method of claim 34, wherein the access method is selected from at least two different access method types, wherein each different access method type defines a different manner of exposing specified data retrieved from a physical data field.

36.   (Previously Presented)   The computer-readable medium of claim 18, wherein the first query comprises a database query.

37.   (Previously Presented)   The computer-readable medium of claim 18, wherein the selected portion of the first query comprises at least one of a query condition, an instance value in the query condition, a specified result field, and a specified formatting of the result field.

38.   (Previously Presented)   The computer-readable medium of claim 18, wherein the database abstraction model defines a plurality of logical fields that each define: (i) a logical field name, (ii) an access method, and (iii) a location in the physical database for accessing respective data elements in the physical database.

39.   (Previously Presented)   The computer-readable medium of claim 38, wherein the access method is selected from at least two different access method types, wherein each different access method type defines a different manner of exposing specified data retrieved from a physical data field.

40.   (Previously Presented)   The method of claim 30, wherein the first query comprises a database query.

41.   (Previously Presented)   The method of claim 30, wherein the selected portion of the first query comprises at least one of a query condition, an instance value in the query condition, a specified result field, and a specified formatting of the result field.

42.   (Previously Presented)   The method of claim 30, wherein the database abstraction model defines a plurality of logical fields that each define: (i) a logical field name, (ii) an access method, and (iii) a location in the physical database for accessing respective data elements in the physical database.

43.   (Previously Presented)   The method of claim 42, wherein the access method is selected from at least two different access method types, wherein each different access method type defines a different manner of exposing specified data retrieved from a physical data field.